Journal of Neurosurgery

July 2003, Volume 99, Number 1

EDITORIAL:

Endovascular microsurgery. DeWitte Cross and Ralph G. Dacey, Jr. 1
Response. François Proust and Pierre Fréger 2

CLINICAL ARTICLES:

Treatment of anterior communicating artery aneurysms: complementary aspects of microsurgical and endovascular procedures. François Proust, Bertrand DeBono, Didier Hannequin, Emmanuel Gerardin, Erick Clavier, Olivier Langlois, and Pierre Fréger 3
Treatment and outcome in 30 patients with posterior cerebral artery aneurysms. Christopher L. Taylor, Thomas A. Kopitnik, Jr., Duke S. Samson, and Phillip D. Purdy 15
Percutaneous intracranial stent placement for aneurysms. Patrick P. Han, Felipe C. Albuquerque, Francisco A. Ponce, Christopher I. MacKay, Joseph M. Zabramski, Robert F. Spetzler, and Cameron G. McDougall 23
Deep and brainstem cavernomas: a consecutive 8-year series. Tiit Mathiesen, Göran Edner, and Lars Kihlström 31
Mutational analysis of 206 families with cavernous malformations. Maxwell S. H. Laurans, Michael L. DiLuna, Dana Shin, Faheem Niazi, Jennifer R. Voorhees, Carol Nelson-Williams, Eric W. Johnson, Adrian M. Siegel, Gary K. Steinberg, Michel J. Berg, R. Michael Scott, Gioacchino Tedeschi, T. Peter Enevoldson, John Anson, Guy A. Rouleau, Christopher Ogilvy, Issam A. Awad, Richard P. Lifton, and Murat Gunel 38
Reduction in the number of repeated operations for the treatment of subacute and chronic subdural hematomas by placement of subdural drains. Christopher R. P. Lind, Christina J. Lind, and Edward W. Mee 44
Efficacy of moderate hypothermia in patients with severe head injury and intracranial hypertension refractory to mild hypothermia. Tadahiko Shiozaki, Yoshikazu Nakajima, Mamoru Taneda, Osamu Tasaki, Yoshiaki Inoue, Hitoshi Ikegawa, Asako Matsushima, Hiroshi Tanaka, Takeshi Shimazu, and Hisashi Sugimoto 47
Treatment of hydrocephalus determined by the European Orbis Sigma Valve II survey: a multicenter prospective 5-year shunt survival study in children and adults in whom a flow-regulating shunt was used. Patrick W. Hanlo, Giuseppe Cinalli, W. Peter Vandertop, Joop A. J. Faber, Lars Bøgeskov, Svend E. Børgesen, Jürgen Boschert, Paul Chumas, Hans Eder, Ian K. Pople, Willy Serlo, and Eckehard Vitthum 52
Transcranial Doppler ultrasound study of the effects of nitrous oxide on cerebral autoregulation during neurosurgical anesthesia: a randomized controlled trial. Domenico G. Iacopino, Alfredo Conti, Calogero Battaglia, Clotilde Siliotti, Tullio Lucanto, Letterio B. Santamaria, and Francesco Tomasello 58
Matrix metalloproteinase–9 concentration after spontaneous intracerebral hemorrhage. Sònia Abilleira, Joan Montaner, Carlos A. Molina, Jasone Monasterio, Jose Castillo, and José Alvarez-Sabin 65
Bilateral subthalamic stimulation in patients with Parkinson disease: long-term follow up. Rajesh Pahwa, Steven B. Wilkinson, John Overman, and Kelly E. Lyons 71
A waitlist control-group study of cognitive, mood, and quality of life outcome after posteroventral pallidotomy in Parkinson disease. Jason A. R. Carr, Christopher R. Honey, Marci Sinden, Anthony G. Phillips, and Jeffrey S. Martzke 78
Localization of stimulating electrodes in patients with Parkinson disease by using a three-dimensional atlas–magnetic resonance imaging coregistration method. Jerome Yelnik, Philippe Damier, Sophie Demeret, David Gervais, Eric Bardinet, Boulos-Paul Bejjani, Chantal Francois, Jean-Luc Houeto, Isabelle Arnulf, Didier Dormont, Damien Galanaud, Bernard Pidoux, Philippe Cornu, and Yves Agid 89
Loss of sensory discrimination after median nerve injury and activation in the primary somatosensory cortex on functional magnetic resonance imaging. Thomas Hansson and Tom Brismar 100
Successful treatment of intracranial nongerminomatous malignant germ cell tumors by administering neoadjuvant chemotherapy and radiotherapy before excision of residual tumors. Masato Kochi, Youichi Itoyama, Shoji Shiraishi, Isao Kitamura, Toru Marubayashi, and Yukitaka Ushio 106

LABORATORY INVESTIGATIONS:

Subarachnoid hemorrhage–induced upregulation of the 5-HT_{1B} receptor in cerebral arteries in rats. Jacob Hansen-Schwartz, Natalie Løvland Hoel, Cang-Bao Xu, Niels-Aage Svendgaard, and Lars Edvinsson 115
Microscopic measurement of the facial nerve root exit zone from central glial myelin to peripheral Schwann cell myelin. Masato Tomii, Hisashi Onoue, Masaharu Yasue, Shogo Tokudome, and Toshiaki Abe 121
Poly(adenosine diphosphate–ribose) polymerase expression in human traumatic brain injury. Beng Ti Ang, Elgin Yap, Joyce Lim, Wan Loo Tan, Puay Yong Ng, Ivan Ng, and Tseng Tsai Yeo 125
Spinal cord stimulation reducing infarct volume in a model of focal cerebral ischemia in rats. Oren Sagher, Dah-Luen Huang, and Richard F. Keep 131
Neuroprotective activity of tamoxifen in permanent focal ischemia. Harold K. Kimelberg, Yiqiang Jin, Carol Charniga, and Paul J. Feustel 138
Anthropomorphic simulations of falls, shakes, and inflicted impacts in infants. Michael T. Prange, Brittany Coats, Ann-Christine Duhaime, and Susan S. Margulies 143
Accessory intraventricular prominence of the occipital horn of the lateral ventricle. Giovani Vandewalle, Emile Beuls, Linda Vanormelingen, and Marjan Vandersteen 151
Application of shock waves as a treatment modality in the vicinity of the brain and skull. Atsuhiro Nakagawa, Yasuko Kusaka, Takayuki Hirano, Tsutomu Saito, Reizo Shirane, Kazuyoshi Takayama, and Takashi Yoshimoto 156

CASE REPORTS AND TECHNICAL NOTES:

Bilateral retro-auricular dermal sinus tracts with intradural extension. Case report. Farideh Nejat, Mark S. Dias, Behzad Eftekhar, Nahid Nasri Roodsari, and Saiid Hamidi 163
Simultaneous use of bilateral subthalamic nucleus stimulators and an implantable cardiac defibrillator. Case report. Joshua M. Rosenow, Howard Tarkin, Elias Zias, Carmine Sorbera, and Alon Mogilner 167
Category-specific naming deficit identified by intraoperative stimulation mapping and postoperative neuropsychological testing. Case report. Nader Pouratian, Susan Y. Bookheimer, Gregory Rubino, Neil A. Martin, and Arthur W. Toga 170
A new, miniature ultrasonic surgical aspirator with a handpiece designed for transsphenoidal surgery. Technical note. Toshiki Yamasaki, Kouzo Moritake, Hidemasa Nagai, Takeshi Uemura, Takashi Shingu, and Yoshifumi Matsumoto 177
End-to-side neurorhaphy as a salvage procedure for irreparable nerve injuries. Technical note. Tunç C. Ögun, Mustafa Özdemir, Hakan Senaran, and Mehmet E. Üstün 180

CASE ILLUSTRATIONS:

Scalp burns from halo pins following magnetic resonance imaging. Case illustration. Louis J. Kim, Volker K. H. Sonntag, Jonathan T. Hott, Jeffrey A. Nemeth, Jefrey D. Klopfenstein, and Lisa Twardy 186
Endoscopic lamina terminalis fenestration for treatment of hydrocephalus due to tuberculous meningitis. Case illustration. Naoyuki Nakao and Toru Itakura 187

HISTORICAL VIGNETTE:

Osler and the "medico-chirurgical neurologists": Horsley, Cushing, and Penfield. William Feindel 188

BOOK REVIEWS 200

NEUROSURGICAL FORUM: Letters to the Editor 206

NOTICES 210

Journal of Neurosurgery

August 2003, Volume 99, Number 2

EDITORIALS:

Fusiform middle cerebral artery aneurysms. ROBERTO C. HEROS 215
Response. ARTHUR L. DAY 216
Response. NOBUTAKA HORIE 217
Small unruptured paraclinoid aneurysms. ROBERTO C. HEROS 218
Response. KOJI IIHARA AND IZUMI NAGATA 219
Small aneurysms. FREDRIC B. MEYER 220
Response. STEPHEN M. RUSSELL, KE LIN, SIGRID A. HAN, AND JAFAR J. JAFAR 221
Proton beam for arteriovenous malformations. L. DADE LUNSFORD 222
Response. FRED G. BARKER II 223
Carotid artery stenosis. MARC R. MAYBERG 225
Response. ADNAN QURESHI AND L. NELSON HOPKINS 226

CLINICAL ARTICLES:

Spontaneous fusiform middle cerebral artery aneurysms: characteristics and a proposed mechanism of formation. ARTHUR L. DAY, CHRISTOPHER G. GAPOSCHKIN, CHUN JIANG YU, DENNIS J. RIVET, AND RALPH G. DACEY, JR. 228
Unruptured paraclinoid aneurysms: a management strategy. KOJI IIHARA, KENICHI MURAO, NOBUYUKI SAKAI, ATSUSHI SHINDO, HIDEKI SAKAI, TOSHIO HIGASHI, SHUJI KOGURE, JUN C. TAKAHASHI, KATSUHIKO HAYASHI, TOSHIHIRO ISHIBASHI, AND IZUMI NAGATA 241
Smaller cerebral aneurysms producing more extensive subarachnoid hemorrhage following rupture: a radiological investigation and discussion of theoretical determinants. STEPHEN M. RUSSELL, KE LIN, SIGRID A. HAHN, AND JAFAR J. JAFAR 248
Dose–volume prediction of radiation-related complications after proton beam radiosurgery for cerebral arteriovenous malformations. FRED G. BARKER II, WILLIAM E. BUTLER, SUE LYONS, ETHAN CASCIO, CHRISTOPHER S. OGILVY, JAY S. LOEFFLER, AND PAUL H. CHAPMAN 254
Multicenter clinical trial of the NexStent coiled sheet stent in the treatment of extracranial carotid artery stenosis: immediate results and late clinical outcomes. ADNAN I. QURESHI, CHARLENE KNAPE, JOHN MARONEY, M. FAREED K. SURI, AND L. NELSON HOPKINS 264
Cocaine use as a predictor of outcome in aneurysmal subarachnoid hemorrhage. JAY U. HOWINGTON, SCOTT C. KUTZ, GREGORY E. WILDING, AND DEEPAK AWASTHI 271
Aneurysmal subarachnoid hemorrhage in young adults: a comparison between patients in the third and fourth decades of life. TETSUYOSHI HORIUCHI, YUICHIRO TANAKA, KAZUHIRO HONGO, AND SHIGEAKI KOBAYASHI 276
Surveillance neuroimaging of intracranial medulloblastoma in children: how effective, how often, and for how long? DAWN E. SAUNDERS, RICHARD D. HAYWARD, KIM P. PHIPPS, WUI KHEAN CHONG, AND ANGELA M. WADE 280
Efficacy of aprotinin in children undergoing craniofacial surgery. CELIA C. D'ERRICO, HAMISH M. MUNRO, STEVEN R. BUCHMAN, DEBORAH WAGNER, AND KARIN M. MURASZKO 287
Surgical experience in 130 pediatric patients with Chiari I malformations. R. SHANE TUBBS, MATTHEW J. MCGIRT, AND W. JERRY OAKES 291
An inflatable balloon catheter and liquid ^{125}I radiation source (GliaSite Radiation Therapy System) for treatment of recurrent glioma: multicenter safety and feasibility trial. STEPHEN B. TATTER, EDWARD G. SHAW, MARK L. ROSENBLUM, KASTYTIS KARVELIS, LAWRENCE KLEINBERG, JON WEINGART, JEFFREY J. OLSON, IAN R. CROCKER, STEVEN BREM, JAMES L. PEARLMAN, JOY D. FISHER, KATHRYN A. CARSON, AND STUART A. GROSSMAN 297
Evaluation of extracranial–intracranial arterial bypass function by using near-infrared spectroscopy. YOSHIHIRO MURATA, YOICHI KATAYAMA, KAORU SAKATANI, CHIKASHI FUKAYA, AND TSUNEO KANO 304
Preoperative correlation of intraoperative cortical mapping with magnetic resonance imaging landmarks to predict localization of the Broca area. ALFREDO QUINONES-HINOJOSA, STEVEN G. OJEMANN, NADER SANAI, WILLIAM P. DILLON, AND MITCHEL S. BERGER 311
Peroneal intraneural ganglia: the importance of the articular branch. Clinical series. ROBERT J. SPINNER, JOHN L. D. ATKINSON, BERND W. SCHEITHAUER, MICHAEL G. ROCK, ROLFE BIRCH, THOMAS A. KIM, MICHEL KLIOT, DAVID G. KLINE, AND ROBERT L. TIEL 319
Peroneal intraneural ganglia: the importance of the articular branch. A unifying theory. ROBERT J. SPINNER, JOHN L. D. ATKINSON, AND ROBERT L. TIEL 330

LABORATORY INVESTIGATIONS:

Shared *oligodendrocyte lineage* gene expression in gliomas and oligodendrocyte progenitor cells. CORINNE BOUVIER, CATHERINE BARTOLI, LUCINDA AGUIRRE-CRUZ, ISABELLE VIRARD, CAROLE COLIN, CARLA FERNANDEZ, JOANY GOUVERNET, AND DOMINIQUE FIGARELLA-BRANGER 344
Upregulation of neurogenesis and reduction in functional deficits following administration of DETA/NONOate, a nitric oxide donor, after traumatic brain injury in rats. DUNYUE LU, ASIM MAHMOOD, RUILAN ZHANG, YI LI, AND MICHAEL CHOPP 351
Neural–dural transition at the medial anterior cranial base: an anatomical and histological study with clinical applications. AMOS O. DARE, LUCY L. BALOS, AND WALTER GRAND 362
The sphenopetroclivial venous gulf: a microoanatomical study. GIORGIO IACONETTA, MARIO FUSCO, AND MAJJID SAMII 366
Prevention of cerebral vasospasm by humanized anti-CD11/CD18 monoclonal antibody administered after experimental subarachnoid hemorrhage in nonhuman primates. RICHARD E. CLATTERBUCK, PHILIPPE GAILLOUD, LYNN OGATA, ABEYU GEBREMARIAM, GREGORY N. DIETSCH, KIERAN J. MURPHY, AND RAFAEL J. TAMARGO 376
Contribution of Src tyrosine kinase to cerebral vasospasm after subarachnoid hemorrhage. GEN KUSAKA, HITOSHI KIMURA, IKUYO KUSAKA, EDDIE PERKINS, ANIL NANDA, AND JOHN H. ZHANG 383

CASE REPORTS AND TECHNICAL NOTES:

Giant fusiform aneurysms in the middle cerebral artery presenting with hemorrhage of different origins. Report of three cases and review of the literature. NOBUTAKA HORIE, NOBUAKI TAKAHASHI, SHOJI FURUICHI, KATSUHARU MORI, MASANARI ONIZUKA, KEISUKE TSUTSUMI, AND SHOBU SHIBATA 391
Bromocriptine-responsive akinetic mutism following endoscopy for ventricular neurocysticercosis. Case report and review of the literature. THOMAS PSARROS, ALEXANDER ZOUROS, AND CAETANO COIMBRA 397
Gonadotropic pituitary carcinoma: HER-2/neu expression and gene amplification. Report of two cases. FEDERICO RONCAROLI, VANIA NOSÉ, BERND W. SCHEITHAUER, KALMAN KOVACS, EVA HORVATH, WILLIAM F. YOUNG, JR., RICARDO V. LLOYD, MARY C. BISHOP, BRADLEY HSI, AND JONATHAN A. FLETCHER 402
Developmental venous anomalies and sinus pericranii in the blue rubber bleb-nevus syndrome. Case report. PATRIK GABIKIAN, RICHARD E. CLATTERBUCK, PHILIPPE GAILLOUD, AND DANIELLE RIGAMONTI 409
Widespread central nervous system cavernous malformations associated with café-au-lait skin lesions. Case report. KIRAN MUSUNURU, VIRANY HUYNH HILLARD, AND RAJ MURALI 412
Spontaneous hemorrhage associated with a pilomyxoid astrocytoma. Case report. OREN N. GOTTFRIED, DANIEL W. FULTS, JEANNETTE J. TOWNSEND, AND WILLIAM T. COULDWELL 416
A multifunctional, modified rigid neuroendoscopic system: clinical experience with 83 procedures. Technical note. AJAY BAKSHI, RANA PATIR, ASHA BAKSHI, AND AJIT KUMAR BANERJI 421
Computational and experimental study of proximal ventricular catheters. Technical note. JULIAN LIN, MARTIN MORRIS, WILLIAM OLIVERO, FREDERICK BOOP, AND ROBERT A. SANFORD 426

CASE ILLUSTRATION:

Sonographic features of brachial plexus traumatic rupture. Case illustration. AMMAR MALLOUHI, ROMED MEIRER, AND GERD BODNER 432

BOOK REVIEWS 433

NEUROSURGICAL FORUM: Letters to the Editor 437

NOTICES 443

Journal of Neurosurgery

September 2003, Volume 99, Number 3

CLINICAL ARTICLES:

The aspect ratio (dome/neck) of ruptured and unruptured aneurysms. BRYCE WEIR, CHRISTINA AMIDEI, GAIL KONGABLE, J. MAX FINDLAY, NEAL F. KASSELL, JOHN KELLY, LANTING DAI, AND THEODORE G. KARRISON 447

Intraoperative factors associated with surgical outcome in patients with unruptured cerebral aneurysms: the experience of a single surgeon. ARTHUR A. GRIGORIAN, ALVIN MARCOVICI, AND EUGENE S. FLAMM 452

Relative survival rates and patterns of diagnosis analyzed by time period for individuals with primary malignant brain tumor, 1973–1997. JILL S. BARNHOLTZ-SLOAN, ANDREW E. SLOAN, AND ANN G. SCHWARTZ 458

Survival following surgery and prognostic factors for recently diagnosed malignant glioma: data from the Glioma Outcomes Project. EDWARD R. LAWS, IAN F. PARNEY, WEI HUANG, FRED ANDERSON, ANGEL M. MORRIS, ANTHONY ASHER, KEVIN O. LILLEHEI, MARK BERNSTEIN, HENRY BREM, ANDREW SLOAN, MITCHEL S. BERGER, SUSAN CHANG, AND THE GLIOMA OUTCOMES INVESTIGATORS . 467

Use of ^{18}F-choline and ^{11}C-choline as contrast agents in positron emission tomography imaging–guided stereotactic biopsy sampling of gliomas. TOSHIHIKO HARA, TATSUYA KONDO, TETSUO HARA, AND NOBORU KOSAKA 474

Age at symptom onset and long-term survival in patients with neurofibromatosis Type 2. GORO OTSUKA, KIYOSHI SAITO, TETSUYA NAGATANI, AND JUN YOSHIDA 480

Cranial bone fixation: review of literature and description of a new procedure. KEN R. WINSTON AND MARJORIE C. WANG 484

Long-term follow up of bilateral deep brain stimulation of the subthalamic nucleus in patients with advanced Parkinson disease. GALIT KLEINER-FISMAN, DAVID N. FISMAN, ELSPETH SIME, JEAN A. SAINT-CYR, ANDRES M. LOZANO, AND ANTHONY E. LANG 489

Prospective analysis of diplopia after anterior temporal lobectomy for mesial temporal lobe sclerosis. AARON A. COHEN-GADOL, JACQUELINE A. LEAVITT, JAMES J. LYNCH, W. R. MARSH, AND GREGORY D. CASCINO 496

Complications of chronic vagus nerve stimulation for epilepsy in children. MATTHEW D. SMYTH, R. SHANE TUBBS, E. MARTINA BEBIN, PAUL A. GRABB, AND JEFFREY P. BLOUNT 500

Prediction and monitoring of cerebral hyperperfusion after carotid endarterectomy by using single-photon emission computerized tomography scanning. KUNIAKI OGASAWARA, HIROTSUGU YUKAWA, MASAKAZU KOBAYASHI, CHIAKI MIKAMI, HIROMU KONNO, KAZUNORI TERASAKI, TAKASHI INOUE, AND AKIRA OGAWA 504

Dedicated linear accelerator radiosurgery for the treatment of trigeminal neuralgia. ZACHARY A. SMITH, ANTONIO A. F. DE SALLES, LEONARDO FRIGHETTO, BRYAN GOSS, STEVE P. LEE, MICHAEL SELCH, ROBERT E. WALLACE, CYNTHIA CABATAN-AWANG, AND TIMOTHY SOLBERG 511

LABORATORY INVESTIGATIONS:

Surgical strategy for distal anterior cerebral artery aneurysms: microsurgical anatomy. MASATOU KAWASHIMA, TOSHIO MATSUSHIMA, AND TOMIO SASAKI 517

Three-dimensional blood flow analysis in a wide-necked internal carotid artery–ophthalmic artery aneurysm. SATOSHI TATESHIMA, FERNANDO VIÑUELA, J. PABLO VILLABLANCA, YUICHI MURAYAMA, TAKU MORINO, KIYOE NOMURA, AND KAZUO TANISHITA 526

Transcriptional profiling of medulloblastoma in children. PAUL C. PARK, MICHAEL D. TAYLOR, TODD G. MAINPRIZE, LAURENCE E. BECKER, MICHAEL HO, WIESLAW T. DURA, JEREMY SQUIRE, AND JAMES T. RUTKA 534

Magnetic resonance imaging studies of age-dependent responses to scaled focal brain injury in the piglet. ANN-CHRISTINE DUHAIME, JILL V. HUNTER, LORETTA L. GRATE, ANJE KIM, JEFFREY GOLDEN, EUGENE DEMIDENKO, AND CHRISTINE HARRIS 542

Regeneration of rat sciatic nerve across a LactoSorb bioresorbable conduit with interposed short-segment nerve grafts. PAUL C. FRANCEL, KEVIN S. SMITH, F. ALAN STEVENS, SOON C. KIM, JAMES GOSSETT, CYNTHIA GOSSETT, MARK E. DAVIS, MARC LENAERTS, AND PAUL TOMPKINS 549

Growth factor enhancement of peripheral nerve regeneration through a novel synthetic hydrogel tube. RAJIV MIDHA, CATHERINE A. MUNRO, PAUL D. DALTON, CHARLES H. TATOR, AND MOLLY S. SHOICHET 555

CASE REPORTS AND TECHNICAL NOTES:

Possible necessity for deep brain stimulation of both the ventralis intermedius and subthalamic nuclei to resolve Holmes tremor. Case report. PANTALEO ROMANELLI, HELEN BRONTÉ-STEWART, TRACY COURTNEY, AND GARY HEIT 566

Cerebrospinal acanthamebic granulomas. Case report. VERNON VELHO, GOPAL KRISHAN SHARMA, AND DEEPAK AMRUT PALANDE . 572

Neurophysiological criteria for intraoperative prediction of pure motor hemiplegia during aneurysm surgery. Case report. ANDREA SZELÉNYI, ADAURI BUENO DE CAMARGO, EUGENE FLAMM, AND VEDRAN DELETIS 575

Combined transvenous and transarterial embolization of a tentorial–incisural dural arteriovenous malformation followed by primary stent placement in the associated stenotic straight sinus. Case report. NEIL A. TROFFKIN, COLE BLEASE GRAHAM III, TURGUT BERKMEN, AND AJAY K. WAKHLOO 579

Traumatic carotid–cavernous fistula treated by combined transarterial and transvenous coil embolization and associated cavernous internal carotid artery dissection treated with stent placement. Case report. SULEYMAN MEN, HALIL ÖZTÜRK, BAKI HEKIMOGLU, AND ZEKI SEKERCI 584

Reversible hearing loss associated with a malignant pineal germ cell tumor. Case report. NATHALIE GASPAR, ARNAULD VERSCHUUR, GHISLAINE MERCIER, DOMINIQUE COUANET, CHRISTIAN SAINTE-ROSE, AND LAURENCE BRUGIERES 587

Stereotactic radiotherapy for the treatment of lymphocytic hypophysitis. Report of two cases. MICHAEL T. SELCH, ANTONIO A. F. DESALLES, DANIEL F. KELLY, LEONARDO FRIGHETTO, HARRY V. VINTERS, CYNTHIA CABATAN-AWANG, ROBERT E. WALLACE, AND TIMOTHY D. SOLBERG 591

Fluorescence-guided resection of glioblastoma multiforme by using high-dose fluorescein sodium. Technical note. JUN SHINODA, HIROHITO YANO, SHIN-ICHI YOSHIMURA, AYUMI OKUMURA, YASUHIKO KAKU, TORU IWAMA, AND NOBORU SAKAI 597

A device for cooling localized regions of human cerebral cortex. Technical note. HANS E. BAKKEN, HIROTO KAWASAKI, HIROYUKI OYA, JEREMY D. W. GREENLEE, AND MATTHEW A. HOWARD III 604

CASE ILLUSTRATIONS:

Distal posterior inferior cerebellar artery aneurysm with basilar artery stenosis. Case illustration. JUNG YONG AHN, YOUNG SUN CHUNG, AND BYUNG-HEE LEE 609

Episodic hypothermia and hyperhidrosis after subarachnoid hemorrhage. Case illustration. JOCHEN TUETTENBERG, JOHANNES WOITZIK, LEONIE SIEGEL, AND CLAUDIUS THOME 610

BOOK REVIEWS 611

NEUROSURGICAL FORUM: Letters to the Editor 616

NOTICES 620

Journal of Neurosurgery

October 2003, Volume 99, Number 4

PRESIDENTIAL ADDRESS:

Neurosurgical education: the "other" competencies. The 2003 presidential address. ROBERTO C. HEROS 623

CLINICAL ARTICLES:

Axillary nerve repair in 99 patients with 101 stretch injuries. DAVID G. KLINE AND DANIEL H. KIM 630

A genealogical assessment of heritable predisposition to aneurysms. LISA A. CANNON ALBRIGHT, NICOLA J. CAMP, JAMES M. FARNHAM, JOEL MACDONALD, KEYVAN ABTIN, AND KERRY G. ROWE 637

Factors associated with the development of vasospasm after planned surgical treatment of aneurysmal subarachnoid hemorrhage. R. LOCH MACDONALD, AXEL ROSENGART, DEZHENG HUO, AND THEODORE KARRISON 644

Comparison of periprocedure complications resulting from direct stent placement compared with those due to conventional and staged stent placement in the basilar artery. ELAD I. LEVY, RICARDO A. HANEL, ALAN S. BOULOS, BERNARD R. BENDOK, STANLEY H. KIM, KEVIN J. GIBBONS, ADRIAN I. QURESHI, LEE R. GUTERMAN, AND L. NELSON HOPKINS 653

Low-dose aspirin prophylaxis and risk of intracranial hemorrhage in patients older than 60 years of age with mild or moderate head injury: a prospective study. SERGEY SPEKTOR, SAMUEL AGUS, VLADIMIR MERKIN, AND SHLOMO CONSTANTINI ... 661

Patient age and outcome following severe traumatic brain injury: an analysis of 5600 patients. CHANTAL W. P. M. HUKKELHOVEN, EWOUT W. STEYERBERG, ANNEKE J. J. RAMPEN, ELANA FARACE, J. DIK F. HABBEMA, LAWRENCE F. MARSHALL, GORDON D. MURRAY, AND ANDREW I. R. MAAS 666

Expression of Ki-67 antigen in nonfunctioning pituitary adenomas: correlation with growth velocity and invasiveness. JÜRGEN HONEGGER, CARSTEN PRETTIN, FRIEDRICH FEUERHAKE, MANFRED PETRICK, JÜRGEN SCHULTE-MÖNTING, AND MARTIN REINCKE 674

Incidence of venous thromboembolism in patients undergoing craniotomy and motor mapping for glioma without intraoperative mechanical prophylaxis to the contralateral leg. KURTIS I. AUGUSTE, ALFREDO QUINONES-HINOJOSA, CHIRAG GADKARY, GABRIEL ZADA, KATHLEEN R. LAMBORN, AND MITCHEL S. BERGER 680

Management of vestibular schwannoma by fractionated stereotactic radiotherapy and associated cerebrospinal fluid malabsorption. YUTAKA SAWAMURA, HIROKI SHIRATO, TOURU SAKAMOTO, HIDEFUMI AOYAMA, KEISHIRO SUZUKI, RIKIYA ONIMARU, TOYOHIKO ISU, SATOSHI FUKUDA, AND KAZUO MIYASAKA 685

Fusobacterial brain abscess: a review of five cases and an analysis of possible pathogenesis. XIANG Y. HAN, JEFFREY S. WEINBERG, SUJIT S. PRABHU, SAMUEL J. HASSENBUSCH, GREGORY N. FULLER, JEFFREY J. TARRAND, AND DIMITRIOS P. KONTOYIANNIS 693

Long-term motor effect of unilateral pallidal stimulation in 26 patients with advanced Parkinson disease. VEERLE VISSER-VANDEWALLE, CHRIS VAN DER LINDEN, YASIN TEMEL, FRED NIEMAN, HALIME CELIK, AND EMILE BEULS 701

Electrical stimulation of the posterior subthalamic area for the treatment of intractable proximal tremor. JUN-ICHI MURATA, MAYUMI KITAGAWA, HARUO UESUGI, HISATOSHI SAITO, YOSHINOBU IWASAKI, SEIJI KIKUCHI, KUNIO TASHIRO, AND YUTAKA SAWAMURA 708

Writing, calculating, and finger recognition in the region of the angular gyrus: a cortical stimulation study of Gerstmann syndrome. FRANCK-EMMANUEL ROUX, SERGIO BOETTO, OMAR SACKO, FRANCOIS CHOLLET, AND MICHEL TRÉMOULET 716

LABORATORY INVESTIGATIONS:

Selective opening of the blood–brain barrier by a nitric oxide donor and long-term survival in rats with C6 gliomas. ASTRID WEYERBROCK, STUART WALBRIDGE, RYSZARD M. PLUTA, JOSEPH E. SAAVEDRA, LARRY K. KEEFER, AND EDWARD H. OLDFIELD . 728

Transcriptional expression of survivin and its splice variants in brain tumors in humans. YOSHITAKA YAMADA, TOSHIHIKO KUROIWA, TOSHIMASA NAKAGAWA, YOSHINAGA KAJIMOTO, TAKEHIKO DOHI, HARUHITO AZUMA, MOTOMU TSUJI, KAZUHIRO KAMI, AND SHIN-ICHI MIYATAKE 738

Induction of an antitumor immunological response by an intratumoral injection of dendritic cells pulsed with genetically engineered Semliki Forest virus to produce interleukin-18 combined with a systemic administration of interleukin-12. RYUYA YAMANAKA, NAOTO TSUCHIYA, NAOKI YAJIMA, JUNPEI HONMA, HITOSHI HASEGAWA, RYUICHI TANAKA, JAY RAMSEY, R. MICHAEL BLAESE, AND KLEANTHIS G. XANTHOPOULOS 746

Sympathetic mechanisms in cerebral blood flow alterations induced by spinal cord stimulation. SACHIN PATEL, DAH-LUEN HUANG, AND OREN SAGHER 754

Effect of ipsilateral subthalamic nucleus lesioning in a rat parkinsonian model: study of behavior correlated with neuronal activity in the pedunculopontine nucleus. MI FA JEON, YOON HA, YOON HEE CHO, BAE HWAN LEE, YONG GOU PARK, AND JIN WOO CHANG 762

CASE REPORTS AND TECHNICAL NOTES:

Attenuation of cerebellar tremor with implantation of an intrathecal baclofen pump: the role of γ-aminobutyric acidergic pathways in cerebellar tremor. Case report. NIRIT WEISS, RICHARD B. NORTH, SHINJI OHARA, AND FREDERICK A. LENZ 768

Transient dystonia following magnetic resonance imagingin a patient with deep brain stimulation electrodes for the treatment of Parkinson disease . Case report. JÖRG SPIEGEL, GERHARD FUSS, MARTIN BACKENS, WOLFGANG REITH, TIM MAGNUS, GEORG BECKER, JEAN-RICHARD MORINGLANE, AND ULRICH DILLMANN 772

Transarterial approach for selective intravenous coil embolization of a benign dural arteriovenous fistula. Case report. KOJI TOKUNAGA, KRISZTINA BARATH, JEAN-BAPTISTE MARTIN, AND DANIEL A. RÜFENACHT 775

Evolution of a cochlear schwannoma on clinical and neuroimaging studies. Case report. VINI G. KHURANA, MICHAEL J. LINK, COLIN L. W. DRISCOLL, AND CHARLES W. BEATTY 779

Dual-floor burr hole adjusted to burr hole ring and cap for implantation of stimulation electrodes. Technical note. TAKAMITSU YAMAMOTO, YOICHI KATAYAMA, KAZUTAKA KOBAYASHI, HIDEKI OSHIMA, AND CHIKASHI FUKAYA 783

Percutaneous trigeminal nerve radiofrequency rhizotomy guided by computerized tomography fluoroscopy. Technical note. SEBASTIÃO GUSMÃO, MARCELO OLIVEIRA, UEDSON TAZINAFFO, AND CHRISTOPHER R. HONEY 785

HISTORICAL VIGNETTE:

Historical vignette. Harvey Cushing's *Meningiomas* text and the historical origin of the resectability criteria for the anterior one third of the superior sagittal sinus. RAJ K. SHRIVASTAVA, SALOMAO SEGAL, MARTIN B. CAMINS, CHANDRANATH SEN, AND KALMON D. POST 787

BOOK REVIEWS 792

NEUROSURGICAL FORUM: LETTERS TO THE EDITOR 796

NOTICES 802

Journal of Neurosurgery

November 2003, Volume 99, Number 5

EDITORIALS:

Case volume and mortality. ROBERTO C. HEROS 805
Response. DEWITTE T. CROSS III AND RALPH G. DACEY, JR. 806
Quality of life in acoustics. ELANA FARACE AND LAWRENCE F. MARSHALL 807
Response. SIMONE A. BETCHEN, JANE WALSH, AND KALMON D. POST. 808

CLINICAL ARTICLES:

Mortality rates after subarachnoid hemorrhage: variations according to hospital case volume in 18 states. DEWITTE T. CROSS III, DAVID L. TIRSCHWELL, MARY ANN CLARK, DAN TUDEN, COLIN P. DERDEYN, CHRISTOPHER J. MORAN, AND RALPH G. DACEY, JR. 810
Self-assessed quality of life after acoustic neuroma surgery. SIMONE A. BETCHEN, JANE WALSH, AND KALMON D. POST 818
Association between a black band on the inner membrane of a chronic subdural hematoma on T_2*-weighted magnetic resonance images and enlargement of the hematoma. TOSHIO IMAIZUMI, YOSHIFUMI HORITA, TOSHIMI HONMA, AND JUN NIWA 824
Evaluation of an antibiotic-impregnated shunt system for the treatment of hydrocephalus. SOMA T. GOVENDER, NARENDRA NATHOO, AND JAMES R. VAN DELLEN 831
Recurrent spontaneous spinal cerebrospinal fluid leaks and intracranial hypotension: a prospective study. WOUTER I. SCHIEVINK, M. MARCEL MAYA, AND MARY RIEDINGER 840
Treatment of intracerebral hematomas caused by aneurysm rupture: coil placement followed by clot evacuation. DAVID B. NIEMANN, ANDREW D. WILLS, NICHOLAS F. MAARTENS, RICHARD S. C. KERR, JAMES V. BYRNE, AND ANDREW J. MOLYNEUX 843
Sex steroid hormone exposures and risk for meningioma. BALRAJ S. JHAWAR, CHARLIE S. FUCHS, GRAHAM A. COLDITZ, AND MEIR J. STAMPFER 848
Progress in long-term survival in adult patients with supratentorial low-grade gliomas: a population-based study of 993 patients in whom tumors were diagnosed between 1970 and 1993. TOM B. JOHANNESEN, FRØYDIS LANGMARK, AND KNUT LOTE 854
Surgery for Parkinson disease in the United States, 1996 to 2000: practice patterns, short-term outcomes, and hospital charges in a nationwide sample. EMAD N. ESKANDAR, ALICE FLAHERTY, G. REES COSGROVE, LESLIE A. SHINOBU, AND FRED G. BARKER II 863
Evolving metabolic changes during the first postoperative year after subthalamotomy. MAJA TROST, PHILIP C. SU, ANNA BARNES, SHERWIN L. SU, RUOH-FANG YEN, HAM-MIN TSENG, YILONG MA, AND DAVID EIDELBERG 872

LABORATORY INVESTIGATIONS:

Efficient reinnervation of hindlimb muscles by thoracic motor neurons after nerve cross-anastomosis in rats. SONG LIU, PHONG DAMHIEU, PAULINE DEVANZE, GÉRARD SAÏD, JEAN MICHEL HEARD, AND MARC TADIÉ 879
Prognostic significance of annexin VII expression in glioblastomas multiforme in humans. KUO-SHENG HUNG AND SHEN-LONG HOWNG 886
Safety and efficacy of convection-enhanced delivery of gemcitabine or carboplatin in a malignant glioma model in rats. JEFFREY W. DEGEN, STUART WALBRIDGE, ALEXANDER O. VORTMEYER, EDWARD H. OLDFIELD, AND RUSSELL R. LONSER 893
Effects of delayed, prolonged hypothermia on the pial vascular response after traumatic brain injury in rats. YUJI UEDA, ENOCH P. WEI, HERMES A. KONTOS, EIICHI SUEHIRO, AND JOHN T. POVLISHOCK 899
Interleukin-1β and adverse effects on cerebral blood flow during long-term global hypoperfusion. CORMAC O. MAHER, ROBERT E. ANDERSON, HEIDI S. MARTIN, ROBYN L. MCCLELLAND, AND FREDRIC B. MEYER 907

CASE REPORTS AND TECHNICAL NOTES:

Metastatic melanoma of the pituitary gland. Case report. GILBERTO KA KIT LEUNG, WING SUN CHOW, KATHRYN CHOON BENG TAN, YIU WAH FAN, AND KAREN SIU LING LAM 913
Facial neuropathy due to axonal degeneration and microvasculitis following gamma knife surgery for vestibular schwannoma: a histological analysis. Case report. TAKASHI WATANABE, NOBUHITO SAITO, JUNKO HIRATO, HIDETOSHI SHIMAGUCHI, HIROYA FUJIMAKI, AND TOMIO SASAKI 916
Use of an anteromedial subdural strip electrode in the evaluation of medial temporal lobe epilepsy. Technical note. AARON A. COHEN-GADOL AND DENNIS D. SPENCER 921
Modifications to the orbitozygomatic approach. Technical note. G. MICHAEL LEMOLE, JR., JEFFREY S. HENN, JOSEPH M. ZABRAMSKI, AND ROBERT F. SPETZLER 924
Clip wrapping for partial avulsion of the aneurysm neck. Technical note. GIUSEPPE LANZINO AND ROBERT F. SPETZLER 931

CASE ILLUSTRATIONS:

Delayed occlusion following carotid artery stent placement. Case illustration. JOUJI KOKUZAWA, SHINICHI YOSHIMURA, YASUHIKO KAKU, AND NOBORU SAKAI 933
Odontoidectomy in the treatment of neurogenic hypertension. Case illustration. PÁL BARZÓ, ERIKA VÖRÖS, ÉVA CSAJBÓK, AND RÓBERT VERES 934
Chiari malformation–associated craniometaphysial dysplasia. Case illustration. JANGBO LEE, KAZUTOSHI HIDA, TOSHITAKA SEKI, AND YOSHINOBU IWASAKI 935

BOOK REVIEWS 936

NEUROSURGICAL FORUM: Letters to the Editor 938

NOTICES 941

Journal of Neurosurgery

December 2003, Volume 99, Number 6

EDITORIAL:

Case volume and outcome. ROBERTO C. HEROS 945
Response. JOHN A. COWAN, JR. AND B. GREGORY THOMPSON 946

CLINICAL ARTICLES:

Outcomes after cerebral aneurysm clip occlusion in the United States: the need for evidence-based hospital referral. JOHN A. COWAN, JR., JUSTIN B. DIMICK, REID M. WAINESS, GILBERT R. UPCHURCH, JR., AND B. GREGORY THOMPSON 947
No effect of enoxaparin on outcome of aneurysmal subarachnoid hemorrhage: a randomized, double-blind, placebo-controlled clinical trial. JARI SIIRONEN, SEPPO JUVELA, JOONA VARIS, MATTI PORRAS, KRISTIINA POUSSA, SORELLA ILVESKERO, JUHA HERNESNIEMI, AND RIITA LASSILA 953
Multimodal treatment of ruptured dissecting aneurysms of the vertebral artery during the acute stage. JUN-ICHIRO HAMADA, YUTAKA KAI, MOTOHIRO MORIOKA, SHIGETOSHI YANO, TATEMI TODAKA, AND YUKITAKA USHIO 960
Delayed hemorrhage following resection of an arteriovenous malformation in the brain. MICHAEL K. MORGAN, MARK WINDER, NICHOLAS S. LITTLE, SIMON FINFER, AND ELIZABETH RITSON 967
Urgent endovascular treatment of acute symptomatic occlusion of the cervical internal carotid artery. HUAN WANG, GIUSEPPE LANZINO, KENNETH FRASER, PATRICK TRACY, AND DAVID WANG 972
Characterization of perioperative seizures and epilepsy following aneurysmal subarachnoid hemorrhage. CHIH-LUNG LIN, AARON S. DUMONT, ANN-SHUNG LIEU, CHEN-PO YEN, SHIUH-LIN HWANG, AIJ-LIE KWAN, NEAL F. KASSELL, AND SHEN-LONG HOWNG 978
Enhanced stability of somatosensory evoked potentials attained in the median nerve by using temporal electrodes for intraoperative recording in patients in the semisitting position. HELMUT WIEDEMAYER, IBRAHIM EROL SANDALCIOGLU, JENS REGEL, WOLF ARMBRUSTER, HEIKE SCHAEFER, AND DIETMAR STOLKE 986
Asymmetry of pressure autoregulation after traumatic brain injury. ERIC A. SCHMIDT, MAREK CZOSNYKA, LUZIUS A. STEINER, MARCELLA BALESTRERI, PIOTR SMIELEWSKI, STEFAN K. PIECHNIK, BASIL F. MATTA, AND JOHN D. PICKARD 991
Analysis of taste disturbance before and after surgery in patients with vestibular schwannoma. KATSUSHIGE WATANABE, NOBUHITO SAITO, MAKOTO TANIGUCHI, TAKAAKI KIRINO, AND TOMIO SASAKI 999
A prospective controlled study of sleep respiratory events in patients with craniovertebral junction malformation. RICARDO VIEIRA BOTELHO, LIA RITA AZEREDO BITTENCOURT, JOSÉ MARCOS ROTTA, AND SERGIO TUFIK 1004
Cerebral metabolic correlates as potential predictors of response to anterior cingulotomy for treatment of major depression. DARIN D. DOUGHERTY, ANTHONY P. WEISS, G. REES COSGROVE, NATHANIEL M. ALPERT, EDWIN H. CASSEM, ANDREW A. NIERENBERG, BRUCE H. PRICE, HELEN S. MAYBERG, ALAN J. FISCHMAN, AND SCOTT L. RAUCH 1010
Delineating gray and white matter involvement in brain lesions: three-dimensional alignment of functional magnetic resonance imaging and diffusion-tensor imaging. TALMA HENDLER, PAZIT PIANKA, MICHAL SIGAL, MICHAL KAFRI, DAFNA BEN-BASHAT, SHLOMI CONSTANTINI, MOSHE GRAIF, ITZHAK FRIED, AND YANIV ASSAF 1018

LABORATORY INVESTIGATIONS:

Microsurgical anatomy of the great cerebral vein of Galen and its tributaries. PATRICK CHAYNES 1028
Increased invasive capacity of connexin43-overexpressing malignant glioma cells. WEI ZHANG, CHIEDOZIE NWAGWU, DUC MINH LE, V. WEE YONG, HUA SONG, AND WILLIAM T. COULDWELL 1039
Inhibition of DNA repair for sensitizing resistant glioma cells to temozolomide. TAKAO KANZAWA, JOSHUA BEDWELL, YASUKO KONDO, SEIJI KONDO, AND ISABELLE M. GERMANO 1047
Reduction of infarct volume and apoptosis by grafting of encapsulated basic fibroblast growth factor–secreting cells in a model of middle cerebral artery occlusion in rats. KENJIRO FUJIWARA, ISAO DATE, TETSURO SHINGO, HIDEYUKI YOSHIDA, KAZUKI KOBAYASHI, AKIRA TAKEUCHI, AKIMASA YANO, TAKASHI TAMIYA, AND TAKASHI OHMOTO 1053
Repetitive transcranial magnetic stimulation for protection against delayed neuronal death induced by transient ischemia. MINORU FUJIKI, HIDENORI KOBAYASHI, TATSUYA ABE, AND TOHRU KAMIDA 1063
Evaluation of a novel proplylene oxide–treated collagen material as a dural substitute. CORMAC O. MAHER, ROBERT E. ANDERSON, ROBYN L. MCCLELLAND, AND MICHAEL J. LINK 1070

CASE REPORTS:

Successful stent placement for cervical artery dissection associated with the Ehlers–Danlos syndrome. Case report and review of the literature. AKIRA KURATA, HIDEHIRO OKA, TAKEMOTO OHMOMO, HITOSHI OZAWA, SACHIO SUZUKI, KIYOTAKA FUJII, SHINICHI KAN, YOSHIO MIYSSAKA, AND HARUE ARAI 1077
Clinical application of robotic telemanipulation system in neurosurgery. Case report. TETSUYA GOTO, KAZUHIRO HONGO, YUKINARI KAKIZAWA, HISASHI MURAOKA, YOSUKE MIYAIRI, YUICHIRO TANAKA, AND SHIGEAKI KOBAYASHI 1082
Hemangiopericytoma of the confluence of sinuses and the transverse sinuses. Case report. FREDERIC P. COLLIGNON, AARON A. COHEN-GADOL, AND DAVID G. PIEPGRAS 1085
Intracranial follicular dendritic cell sarcoma. Case report. MARTIN HASSELBLATT, ABOLGHASSEM SEPEHRNIA, MARCUS VON FALKENHANUSEN, AND WERNER PAULUS 1089
Healing of a brain abscess by secondary intention. Case report. PETER GEORGIUS, XAVIER K. YU, JEFFREY V. ROSENFELD, AND PAUL S. D'URSO 1091
Chronic bilateral thalamic stimulation: a new therapeutic approach in intractable Tourette syndrome. A report of three cases. VEERLE VISSER-VANDEWALLE, YASIN TEMEL, PETER BOON, FRED VREELING, HENRY COLLE, GOVERT HOOGLAND, HENK J. GROENEWEGEN, AND CHRIS VAN DER LINDEN 1094

CASE ILLUSTRATION:

Anomalous origin of the left A_1 segment from the right internal carotid artery. Case illustration. ERIC H. SINCOFF AND SALEEM I. ABDULRAUF 1101

HISTORICAL VIGNETTE:

Treatment of aneurysms with wires and electricity. A historical overview. KHAWAR SIDDIQUE, JORGE ALVERNIA, KENNETH FRASER, AND GIUSEPPE LANZINO 1102

BOOK REVIEWS 1108

NEUROSURGICAL FORUM: Letters to the Editor 1110

NOTICES 1120

INDICES TO VOLUME 99 1123